

**Work Order ID 117540**

Friday, April 25, 2014 8:15:46 AM

**\*117540\***

Page 1

Item ID: D5021-5

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Foam, Center Panel, Aft

Stop **\*NS2\***

Start Date: 4/25/2014 Start Qty: 12.00

**\*12\***

Cust Item ID:

Required Date: 5/9/2014 Req'd Qty: 12.00

**\*12\***

Customer:

Reference:

Approvals:

Process Plan: C2Date: 14/04/25

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

D5021

B

110

0.00

**\*110\***

Purchasing

Memo

0.00

Purchasing

Issue P/O:

23965

Manufacture as per Dwg

Possible supplier: ACP COMPOSITES

~~C OF C note is required.~~ N/AC2 14/04/29 12

120

0.00

**\*120\***

Packaging

Receive &amp; Inspect for Damage &amp; Mat'l Certs

Memo

0.00

Packaging

~~C OF C note is required.~~ N/A14/04/15 (10)

130

0.00

**\*130\***

QC

QC6- Inspect dimensions to drawing

Memo

0.00

Quality Control

DAS

27

9-89

4/5/1510

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |      |      |     | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                   | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |             |              |              |  |  |
|--|------|------|-----|--|-------------------|---|-------------|--------------|--------------|--|--|
| Root Cause   | Date | Step | Qty | Description of work order update or non-conformance  | Initial Chief Eng | Action Description  | Sign & Date | Verification | QC Inspector |  |  |
| Design   |      |      |     |  |                   |   |             |              |              |  |  |
| Doc/Data   |      |      |     |  |                   |   |             |              |              |  |  |
| Equip/Tooling  |      |      |     |  |                   |   |             |              |              |  |  |
| Handling/Pre   |      |      |     |  |                   |   |             |              |              |  |  |
| Material   |      |      |     |  |                   |   |             |              |              |  |  |
| Operator   |      |      |     |  |                   |   |             |              |              |  |  |
| Offset/Setup   |      |      |     |  |                   |   |             |              |              |  |  |
| Process  |      |      |     |  |                   |   |             |              |              |  |  |
| Supplier   |      |      |     |  |                   |   |             |              |              |  |  |
| Training   |      |      |     |  |                   |   |             |              |              |  |  |
| Transport  |      |      |     |  |                   |   |             |              |              |  |  |
| Unapproved   |      |      |     |  |                   |   |             |              |              |  |  |

| FAULT CATEGORY   |  |  |  |   |  |  |  |
|--|--|--|--|---|--|--|--|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube |  | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function |  | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence |  | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |  |

**Work Order ID 117540**

Friday, April 25, 2014 8:15:46 AM

**\*117540\***

Page 2

Item ID: D5021-5 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Foam, Center Panel, Aft  
Start Date: 4/25/2014 Start Qty: 12.00 **\*12\*** Cust Item ID:  
Required Date: 5/9/2014 Req'd Qty: 12.00 **\*12\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                        | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 140                            | Identify as per dwg & Stock Location: <u>MF</u> | 0.00                 |         |        |              |               |               |                  |                |
| <b>*140*</b>                   |   |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo  | 0.00                 |         |        |              | 10            |               |                  | SAD 4/6/31     |
| Packaging                      |   |                      |         |        |              |               |               |                  |                |
| 150                            | QC21- Final Inspection - Work Order Release     | 0.00                 |         |        |              |               |               |                  |                |
| <b>*150*</b>                   |   |                      |         |        |              |               |               |                  |                |
| QC                             | Memo  | 0.00                 |         |        |              |               |               |                  | 14/7/31 JH     |
| Quality Control                |   |                      |         |        |              |               |               |                  |                |

(A) 4-7-31

# Picklist Print

Friday, April 25, 2014 8:15:46 AM

Page 1

Work Order ID: 117540

**\*117540\***

Parent Item: D5021-5

**\*D5021-5\***

Parent Item Name: Foam, Center Panel, Aft

Start Date: 4/25/2014

Required Date: 5/9/2014

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP REV:A 13.12.20 NEW ISSUE DD VERF:JLM IPP  
REV:B 14.04.09 NOW OUTSOURCE DD VERF:JLM

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

|                         |  |           |  |    |  |  |      |        |           |    |  |  |  |
|-------------------------|--|-----------|--|----|--|--|------|--------|-----------|----|--|--|--|
| D5021-5P                |  | Purchased |  | No |  |  | Each | 0.0000 |           | 12 |  |  |  |
| <b>*D5021-5P*</b>       |  |           |  |    |  |  |      |        | <b>**</b> |    |  |  |  |
| Foam, Center Panel, Aft |  |           |  |    |  |  |      |        |           |    |  |  |  |

144/07/10 10

DS033-1

M114429

16 SF x 12 = 192

0214/04/29

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

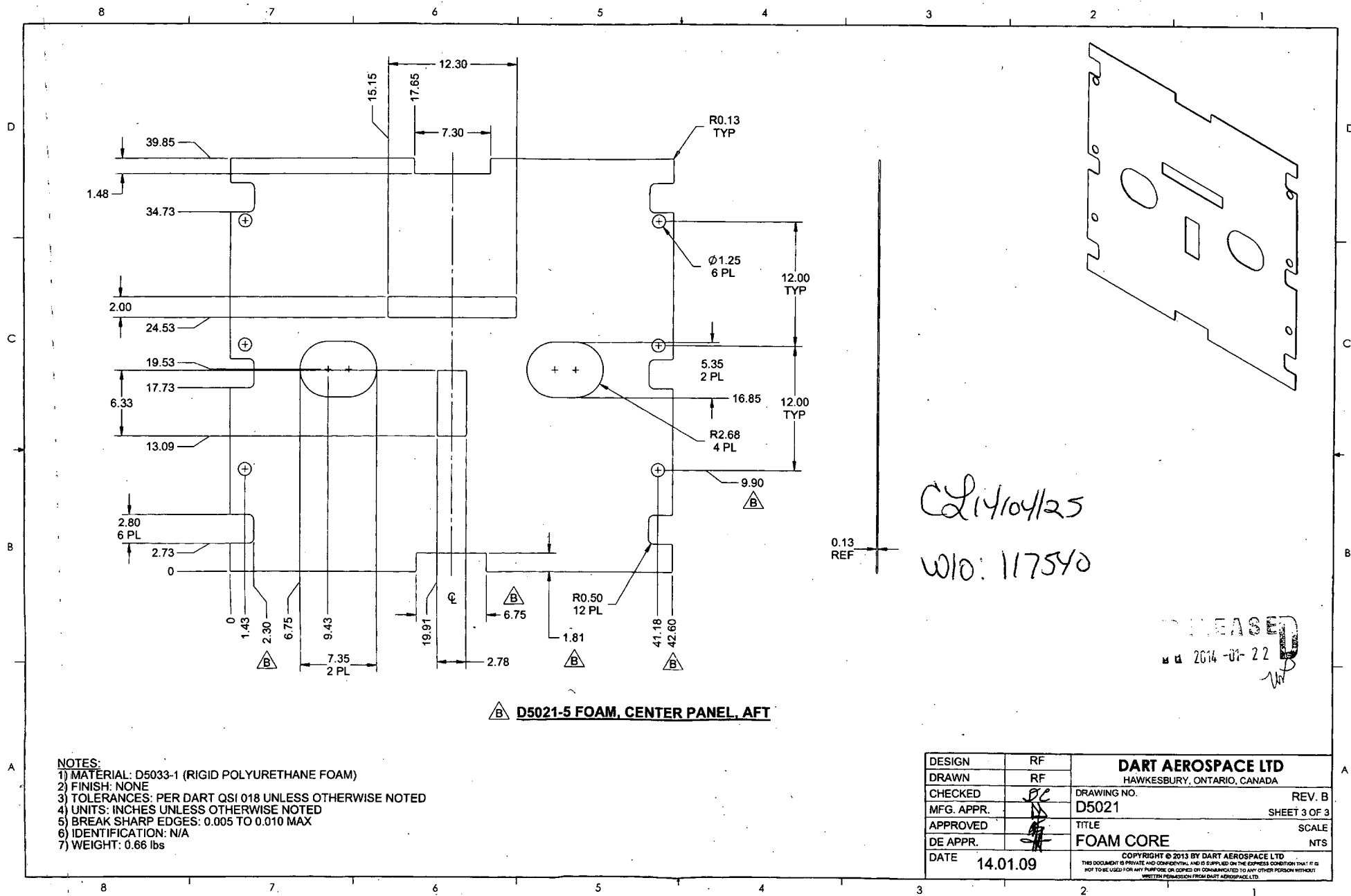
Work Order update only ☐

|  |  |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>   | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>   | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>   | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>   | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |   |                   |                    |             |              |              |
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Transport     |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

### FAULT CATEGORY

|  |  |   |   |
|--|--|---|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other<br><br>_____<br>_____<br>_____ |
|--|--|---|---|



CL 14104/25  
W10: 117540

**D5021-5 FOAM, CENTER PANEL, AFT**

- NOTES:
- 1) MATERIAL: D5033-1 (RIGID POLYURETHANE FOAM)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 0.66 lbs

|            |          |   |              |
|------------|----------|---|--------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |              |
| DRAWN      | RF       |   |              |
| CHECKED    | RF       | DRAWING NO.<br><b>D5021</b>   | REV. B       |
| MFG. APPR. |          | TITLE<br><b>FOAM CORE</b>   | SHEET 3 OF 3 |
| APPROVED   |          | SCALE   | NTS          |
| DE APPR.   |          | COPYRIGHT © 2013 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |              |
| DATE       | 14.01.09 |   |              |



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO23965**

Purchase Order Date 4/28/2014

PO Print Date 5/6/2014

Page Number 2 of 3

**Order From :**

VC-TPI001

**Ship To :** DART AEROSPACE LTD

TPI INDUSTRIES INC.  
148 RUE GOODFELLOW  
DELSON, QUEBEC J5B 1V4  
CANADA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone** 450-633-0484

**Ship To Contact**

**Ship To Phone**

**Ship Via:** FedEx PI collect

**Ship Acct:**

**Buyer**

Michael Gregoire

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

FCA - (Free Carrier)

**Line Total:** \$131.78

|   |          |                         |           |    |       |         |          |
|---|----------|-------------------------|-----------|----|-------|---------|----------|
| 4 | D5021-1P | Foam, Center Panel, Fwd | 5/12/2014 | FN | 10.00 | \$13.18 | \$131.79 |
|   |          |                         | Yes       |    | Each  |         |          |
|   |          |                         | 5/12/2014 |    |       |         |          |

Manufacture as per Drawing D5021 rev.B  
B117538

**Line Total:** \$131.78

|   |          |                               |           |    |       |         |          |
|---|----------|-------------------------------|-----------|----|-------|---------|----------|
| 5 | D5021-3P | Foam, Center Panel,<br>Middle | 5/12/2014 | FN | 10.00 | \$13.18 | \$131.79 |
|   |          |                               | Yes       |    | Each  |         |          |
|   |          |                               | 5/12/2014 |    |       |         |          |

Manufacture as per Drawing D5021 rev.B  
B117539

**Line Total:** \$131.78

|   |          |                         |           |    |       |         |          |
|---|----------|-------------------------|-----------|----|-------|---------|----------|
| 6 | D5021-5P | Foam, Center Panel, Aft | 5/12/2014 | FN | 10.00 | \$13.18 | \$131.78 |
|   |          |                         | Yes       |    | Each  |         |          |
|   |          |                         | 5/12/2014 |    |       |         |          |

Manufacture as per Drawing D5021 rev.B  
B117540

**Note:**

5/6/2014